REMARKS

Claims 1, 2 and 4-28 are active. Claims 18 and 26 have been amended for clarity. Claims 27 and 28 have been revised to address an indefiniteness issue, andd find support in the specification at page 5, line 3. Claim 29 and 30 find support in the specification at page 4, lines 20-22 and page 6, lines 17-18. Claim 31 also finds support on page 6, lines 15-23. Accordingly, the Applicants do not believe that any new matter has been added.

The Applicants thank Examiner Yu for the helpful and courteous discussion of May 12, 2004. It was suggested that certain claims be amended to more clearly point out certain surface active agents and that the Applicants point out descriptive support for these agents in the specification. Claims 27 and 28 have now been so amended and Claims 29-31 added to refer to surface active agents described in the specification. The surface active agents referred to in the Declaration of December 19, 2002 were also discussed. It was noted that some of these compounds are characterized by generic terminology such as "alkyl glutamate sodium". The Applicants will consider revising this declaration to more clearly identify specific surface active agents, e.g., substitute terms such as "lauryl glutamate sodium" for the more generic "alkyl glutamate sodium".

Rejection—35 U.S.C. 112, second paragraph

Claim 27 was rejected under 35 U.S.C. 112, second paragraph, as being indefinite. This rejection is moot in view of the amendments above.

Objections

Claims 6, 7 and 18 were objected to under 37 C.F.R. 1.75(c) as failing to further limit the subject matter of a previous claim. Claims 6 and 7 require that the claimed oil-in-water emulsion be "obtained" by particular procedures. These emulsion procedures (applying a shear force corresponding to a shear rate of 1,000,000 s^{-1} or more) further limit these claims because they would result in a particular type of emulsion falling within the scope of prior Claim 1 or 2.

Rejection--35 U.S.C. 103

Claims 1-3, 6-8, 10-21, 26 and 27 were rejected under 35 U.S.C. 103(a) as being unpatentable over Yu, English translation of JP 63-126542. Yu does not anticipate the present claims, because it does not disclose with sufficient specificity the selection of a surface active agent having a dynamic surface tension of 57 mN/m or less. By selecting such an agent when the amount of oily component in the emulsion is greater than 10 times the amount of surface active agent, the Applicants have shown that a stable, transparent emulsion results.

Yu does not envisage or suggest (1) selecting of a surface active agent having a dynamic surface tension of 57 mN/m or less for (2) the production of an emulsion wherein the ratio of the oily component is more than 10 based on the surface active agent.

Yu, see e.g. page 7, lines 1-3, is broadly directed to emulsions produced with various ratios of ingredients and does not suggest that stable, highly-transparent emulsions could be

produced using a ratio of at least 10 parts oily component to 1 part of surface active agent. Specifically, Yu does not suggest that such emulsions could be produced by selecting a surface active agent having a dynamic surface tension of 57 mN/m or less.

Moreover, Yu does not provide a reasonable expectation of success in obtaining emulsions with the superior properties of those of the invention, such as superior transparency. Selection of a surface active agent with a dynamic surface tension of 57 mN/m, provides an emulsion with superior properties, such as very high transparency, see Table A below.

TABLE A

surface active agent	dynamic surface tension	Transparency
lauryl glutamate sodium	**49.6 mN/m**	**>80%**
POE lauryl ether	**51.6 mN/m**	**>80%**
lauryl methyl taurine sodium	**53.3 mN/m**	**>80%**
lauryl Castor oil	58.0 mN/m	<20%
sorbitane monolaurlylate	58.4 mN/m	<20%

As shown in Table A above, oil-in-water emulsions produced using a surface active agent having a dynamic surface tension of 57 mN/m or less (**embolded**), produce highly

transparent emulsions, e.g. emulsions having a transparency above 80%. On the other hand, emulsions produced with surface active agents having a dynamic surface tension above 57 mN/m exhibited less than 20% transparency. Emulsions with high transparency are desirable in many applications, such as in cosmetics.

The Official Action indicated that the data in the Declaration were not persuasive because the data were not commensurate in scope with the claims. The Applicants disagree as the claims are clearly limited to emulsions produced by selecting a surface active agent having a dynamic surface tension of 57 mN/m or less. The Declaration shows precisely this: that selection of a surface active agent having a dynamic surface tension of 57 mN/m or less produces a highly transparent emulsion as shown by a representative number of such surface active agents. The emulsions produced with the surface active agents required by the present invention each had transparency above 80%. On the other hand, comparative surface active agents not having a dynamic surface tension of 57 mN/m or less did not, producing emulsions having less than 20% transparency. Accordingly, the Applicants respectfully submit that the data of record clearly are commensurate in scope with the claims and demonstrate the superior properties of the emulsions of the present invention.

Therefore, as the prior art does not envisage or suggest the stable oil-in-water emulsions of the invention that use a surface active agent with a dynamic surface tension of 57 mN/m or less, or disclose or suggest the superior properties of such emulsions, the Applicants respectfully request that this rejection be withdrawn.

Rejection--35 U.S.C. 103

Claims 4, 5 and 9 were rejected under 35 U.S.C. 103(a) as being unpatentable over Yu, English translation of JP 63-126542, as applied to Claims 1-4, 6-8 and 10-21 above, and further in view of Drapier et al., U.S. Patent No. 6,121,228. Drapier is directed to liquid cleaning compositions that contain less than 10 parts of oily substance to 1 part surfactant and Draper does not suggest producing emulsions by selecting a surface active agent having a dynamic surface tension of 57 mN/m or less. The Applicants submit that this rejection may be withdrawn for the reasons set forth above for the rejection of Claims 1-4, 6-8, 10-21, 26 and 27.

Rejection--35 U.S.C. 103

Claim 10 was rejected under 35 U.S.C. 103(a) as being unpatentable over Yu, English translation of JP 63-126542, as applied to Claims 1-4, 6-8 and 10-21 above, and further in view of Ansel, Pharmaceutical Dosage Forms and Drug Delivery Systems. The Applicants submit that this rejection may be withdrawn for the reasons set forth above for the rejection of Claims 1-4, 6-8, 10-21, 26 and 27.

Rejection--35 U.S.C. 103

Claim 22 was rejected under 35 U.S.C. 103(a) as being unpatentable over Yu, English translation of JP 63-126542, as applied to Claims 1-4, 6-8 and 10-21 above, and further in view of Gers-Berlag et al., U.S. Patent No. 5,876,702. The Applicants submit that this

rejection may be withdrawn for the reasons set forth above for the rejection of Claims 1-4, 6-8, 10-21, 26 and 27.

Rejection--35 U.S.C. 103

Claims 23 and 25 were rejected under 35 U.S.C. 103(a) as being unpatentable over Yu, English translation of JP 63-126542, as applied to Claims 1-4, 6-8 and 10-21 above, and further in view of Diec et al., U.S. Patent No. 6,468,551 B1. The Applicants submit that this rejection may be withdrawn for the reasons set forth above for the rejection of Claims 1-4, 6-8, 10-21, 26 and 27.

Rejection--35 U.S.C. 103

Claims 24 and 25 were rejected under 35 U.S.C. 103(a) as being unpatentable over Yu, English translation of JP 63-126542, as applied to Claims 1-4, 6-8, 10-21, 26 and 27 above, and further in view of Brunetta et al., U.S. Patent No. 5,562,911. The Applicants submit that this rejection may be withdrawn for the reasons set forth above for the rejection of Claims 1-4, 6-8, 10-21, 26 and 27.

Rejection--35 U.S.C. 103

Claim 28 was rejected under 35 U.S.C. 103(a) as being unpatentable over Yu, English translation of JP 63-126542, as applied to Claims 1-4, 6-8, 10-21, 26 and 27 above, and further in view of Sojima et al., U.S. Patent No. 6,066,316. The Applicants believe that this rejection may be referring to Claim 8 which is directed to a cosmetic, because prior Claim 28 was directed to a methyltaurine compound not disclosed by Sojima. The Applicants submit

that this rejection may be withdrawn for the reasons set forth above for the rejection of Claims 1-4, 6-8, 10-21, 26 and 27. Moreover, Sojima does not disclose an emulsion having an average particle size ranging from 0.01 to 0.2μm and is silent about the dynamic surface tension value of POE behenyl ether. Moreover, the rejection does not address the other components in the composition of Test Example 2, which appear to be surface active agents. The composition of Test Example 2 would not meet the weight ratio limitation of Claim 1 if these components are surface active agents.

CONCLUSION

In view of the above amendments and remarks, the Applicants respectfully submit that this application is now in condition for allowance. Early notification to that effect is earnestly solicited.

Respectfully submitted,

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